

**Claims:**

Please cancel claims 16 to 60

- 1 1. (Original) A collapsible support structure, comprising:
  - 2 a plurality of interconnected frame sections each comprising:
    - 3 a first elongated rigid member having a first end and a second
    - 4 end;
    - 5 a second elongated rigid member having a first end and a
    - 6 second end;
    - 7 wherein the first ends of the first elongated rigid member and
    - 8 the second elongated rigid member are hingedly joined;
    - 9 a collapsible elongated member comprising:
      - 10 an elongated flexible tensioning member connected
      - 11 between the second end of the first elongated rigid
      - 12 member and the second end of the second elongated
      - 13 rigid member;
      - 14 a first hollow tubular rigidizing member extending
      - 15 along a portion of the length of the elongated flexible
      - 16 tensioning member;
      - 17 a second hollow tubular rigidizing member extending
      - 18 along essentially the remainder of the length of the
      - 19 elongated flexible tensioning member; and
      - 20 a rigidizing sleeve member slideably mounted on the
      - 21 first or the second hollow tubular rigidizing member
      - 22 and sized to slideably engage the other of the first and
      - 23 second hollow tubular rigidizing member when the first
      - 24 and second hollow tubular rigidizing members are
      - 25 essentially axially aligned and the rigidizing sleeve
      - 26 member is positioned to slideably engage each of the
      - 27 hollow tubular rigidizing members to form a collapsible

28 elongated tubular member extending essentially  
29 between the second ends of each of the first and second  
30 elongated rigid members and having the elongated  
31 flexible tensioning member axially disposed therein.

1 2. (Original) The structure of claim 1 wherein the interconnected frame  
2 sections each form a triangle.

1 3. (Original) The structure of claim 1 wherein the interconnected frame  
2 sections each form a portion of a geodesic structure.

1 4. (Original) The structure of claim 1 wherein the interconnected frame  
2 sections form a portion of a truncated icosahedron.

1 5. (Original) The structure of claim 4 wherein the interconnected frame  
2 sections form a portion of an upstanding portion of an icosahedron structure  
3 extending between a first and a second lesser circle polygonal shape, with  
4 the hingedly joined first ends of the first and second elongated rigid  
5 members being joined at a corner of the first lesser circle polygonal shape  
6 and the collapsible elongated tubular member forming a side of the second  
7 lesser circle polygonal shape.

1 6. (Original) A collapsible support structure, comprising:  
2 a plurality of interconnected frame sections each comprising:  
3 a first elongated one-piece rigid member having a first end and  
4 a second end;  
5 a second elongated one-piece rigid member having a first end  
6 and a second end;

7 wherein the first ends of the first elongated one-piece rigid  
8 member and the second elongated one-piece rigid member are  
9 hingedly joined;  
10 a collapsible elongated member comprising:  
11 an elongated flexible tensioning member connected  
12 between the second end of the first elongated rigid  
13 member and the second end of the second elongated  
14 rigid member;  
15 a first hollow tubular rigidizing member extending  
16 along a portion of the length of the elongated flexible  
17 tensioning member;  
18 a second hollow tubular rigidizing member extending  
19 along essentially the remainder of the length of the  
20 elongated flexible tensioning member; and  
21 a rigidizing sleeve member slideably mounted on the  
22 first or the second hollow tubular rigidizing member  
23 and sized to slideably engage the other of the first and  
24 second hollow tubular rigidizing member when the first  
25 and second hollow tubular rigidizing members are  
26 essentially axially aligned and the rigidizing sleeve  
27 member is positioned to slideably engage each of the  
28 hollow tubular rigidizing members to form a collapsible  
29 elongated tubular member extending essentially  
30 between the second ends of each of the first and second  
31 elongated one-piece rigid members and having the  
32 elongated flexible tensioning member axially disposed  
33 therein.

1 7. (Original) The structure of claim 6 wherein the interconnected frame  
2 sections each form a triangle.

1 8. (Original) The structure of claim 6 wherein the interconnected frame  
2 sections each form a portion of a geodesic structure.

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1 9. (Original) The structure of claim 6 wherein the interconnected frame  
2 sections form a portion of a truncated icosahedron.

1 10. (Original) The structure of claim 9 wherein the interconnected frame  
2 sections form a portion of an upstanding portion of an icosahedron structure  
3 extending between a first and a second lesser circle polygonal shape, with  
4 the hingedly joined first ends of the first and second elongated rigid  
5 members being joined at a corner of the first lesser circle polygonal shape  
6 and the collapsible elongated tubular member forming a side of the second  
7 lesser circle polygonal shape.

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1 11. (Original) A collapsible support structure, comprising:  
2 a plurality of interconnected frame sections each comprising:  
3 a first elongated rigid member having a first end and a second  
4 end;  
5 a second elongated rigid member having a first end and a  
6 second end;  
7 a third elongated rigid member having a first end and a second  
8 end;  
9 wherein the first ends of the respective first elongated rigid  
10 member and the second elongated rigid member are hingedly  
11 joined, and the second ends of the respective second elongated  
12 rigid member and the third elongated rigid member are  
13 hingedly attached;  
14 a first and a second collapsible elongated member, each  
15 comprising:

16 an elongated flexible tensioning member connected  
17 respectively between the second end of the of the first  
18 elongated rigid member and the second end of the  
19 second elongated rigid member and between the hinged  
20 connection of the first ends of the respective first and  
21 second elongated rigid members and the first end of the  
22 third elongated rigid member;  
23 a first hollow tubular rigidizing member extending  
24 along a portion of the length of the respective elongated  
25 flexible tensioning member;  
26 a second hollow tubular rigidizing member extending  
27 along essentially the remainder of the length of the  
28 respective elongated flexible tensioning member; and  
29 a rigidizing sleeve member slideably mounted on the  
30 first or the second hollow tubular rigidizing member  
31 and sized to slideably engage the other of the first and  
32 second hollow tubular rigidizing members when the  
33 first and second hollow tubular rigidizing members are  
34 essentially axially aligned and the rigidizing sleeve  
35 member is positioned to slideably engage each of the  
36 hollow tubular rigidizing members to form a collapsible  
37 elongated tubular member extending essentially  
38 between respectively the second ends of each of the  
39 first and second elongated rigid members and the  
40 hinged connection of the first ends of the first and  
41 second elongated rigid members and the first end of the  
42 third elongated rigid member, the having the respective  
43 elongated flexible tensioning member axially disposed  
44 therein.

1 12. (Original) The structure of claim 11 wherein the interconnected frame  
2 sections each form a parallelogram comprising two interconnected triangles  
3 sharing the second rigid elongated member as one side of the respective  
4 triangles

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1 13. (Original) The structure of claim 11 wherein the interconnected frame  
2 sections each form a portion of a geodesic structure.

1 14. (Original) The structure of claim 11 wherein the interconnected frame  
2 sections form a portion of a truncated icosahedron.

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1 15. The structure of claim 14 wherein the interconnected frame sections  
2 form a portion of an upstanding portion of a icosahedron structure extending  
3 between a first and a second lesser circle polygonal shape, with the hingedly  
4 joined first ends of the first and second elongated rigid members being  
5 joined at a corner of the first lesser circle polygonal shape and the second  
6 collapsible elongated tubular member forming an adjacent side of the first  
7 lesser circle polygonal shape, and with the hinged connection of the second  
8 ends of the second and third elongated rigid members forming a corner of  
9 the second lesser circle polygonal shape and the second collapsible  
10 elongated tubular member forming an adjacent side of the second lesser  
11 circle polygonal shape.

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